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EXAMINER
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ELPENORD, CANDAL

ART UNIT	PAPER NUMBER
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2416

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10/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,617	<b>Applicant(s)</b> BABONNEAU ET AL.	
	<b>Examiner</b> CANDAL ELPENORD	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-25 and 27-37 is/are rejected.
- 7) ☐ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 18, 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>May 16, 2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because fig. 1 to fig. 5 should be labeled with descriptive legends. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 19-37 have been considered but are moot in view of the new ground(s) of rejection.
3. Independent claims 19, 32, 33, 37 have been amended.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 19, 24-25, 27-28, 31-35, 37** are rejected under 35 U.S.C. 102(e) as being anticipated by Appala et al (US 6,862,265 B1).

**Regarding claim 19**, Appala '265 discloses a method of controlling data packet traffic at input of a network (see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45, see, the host CPU for controlling the switching logic with respect to forwarding decisions in relation to received data packet at the ingress port, col. 3, lines 63 to col. 4, lines 5, fig. 1 in combination with fig. 2, see integrated multiport switch network), the traffic comprising N streams and/or sub-streams which are each associated with a priority level,  $N > 2$  (fig. 1 in combination with fig. 2, see plurality of data packets (i.e. data flows, col. 1, lines 63-66, noted: data flows corresponding to sequence of data packets, col. 62-65) being received at the interface of the integrated switch, col. 3, lines 50-62) each of the packets being marked with the priority level associated with the stream or sub-stream to which said packet belongs (fig. 2, see plurality of priorities associated with data packets (i.e. data flows, col. 1, lines 63-66, col. 4, lines 44-51) wherein the method

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(see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45), comprises: a step of arrival of a packet and obtaining its priority level (see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45), a step of assigning tokens to said packet, if tokens are available for said packet (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines 11-18, col. 4, lines 44-51), implementing a token bucket mechanism with N operating levels with N token buffers (fig. 2, see plurality of token buckets (i.e. TBF 1 to TBF n) where the number of tokens corresponds to the number of data packets and plurality of priorities queues 30, col. 31-39, col. 6, lines 7-15), each comprising a number of available tokens (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines 11-18, col. 4, lines 44-51), the tokens of each of the N token buffers being used to process one of the N priority levels (fig. 2, see plurality of Token Bucket with associated priority queues 30a to 30-30e, col. 4, lines 44-66), wherein the tokens are assigned or not assigned to said packet depending on the tokens available at least in the token buffer used to process the priority level of said packet (noted: the token bucket filters determines whether or not there are sufficient number of tokens available corresponding to the number of packets based on priority col. 2, lines 27-34, col. 5, lines 31-45), a step of each accepting said packet in a buffer (fig. 2, Queuing System 14 for storing received data packets in buffer memory 20, col.

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55-59) forming a means for managing a queue (fig. 1, CPU controlling the operations of queue system 14, col. 3, lines 63-67, noted: the token bucket filters in combination with the CPU sets priorities for the serving queues, col. 5, lines 55 to col. 6, lines 6), if the packet has been assigned tokens, a step of rejecting said packet, if it has not been assigned tokens (noted: dropping the received data packet if there are insufficient number of tokens, col. 5, lines 48-54, col. 6, lines 23-32).

**Regarding claim 20**, Appala '265 discloses method, wherein the traffic comprises N sub-streams each corresponding to one of the N hierarchical levels of a hierarchical stream (noted: data flows corresponding to sequence of data packets, col. 61-65) or an aggregate of hierarchical streams (noted: data flows (i.e. video stream), col. 5, lines 61 to col. 6, lines 3).

**Regarding claim 21**, Appala '265 discloses method, wherein the traffic comprises N sub-streams (noted: data flows corresponding to sequence of data packets, col. 61-65) each corresponding to one of the N types of images of a multimedia stream (noted: data flows corresponding to video stream, col. 5, lines 61 to col. 6, lines 3, col. 4, lines 16-22) or of an aggregate of multimedia streams.

**Regarding claim 23**, Appala '265 discloses method, wherein the traffic comprises N streams and/or sub-streams belong to a same class of service (noted: data flows corresponding to voice data, video stream, col. 5, lines 61 to col. 6, lines 6).

**Regarding claim 24**, Appala '265 discloses method, wherein the rejected packets are discarded (noted: dropping the received data packet if there are insufficient number of tokens, col. 5, lines 48-54, col. 6, lines 23-32).

**Regarding claim 25**, Appala '265 discloses method, wherein the network is of an IP or equivalent type (noted: packets based network for transmission of data packets, col. 3, lines 50-55).

**Regarding claim 27**, Appala '265 discloses method, wherein the tokens of the N token buffers are shared between the N priority levels (fig. 2, see plurality of Token Bucket with associated priority queues 30a to 30-30e, col. 4, lines 44-66), and a packet with priority level i can be assigned tokens from a token buffer associated with a priority level j having lower priority when the tokens available in the token buffer (see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45) of the priority level i are not sufficient (noted: assigning the data packets to lower priority when it is determined there are insufficient number of tokens available, col. 2, lines 27-35, col. 6, lines 23-35).

**Regarding claim 28**, Appala '265 discloses method wherein, for each priority level apart from the priority level having the highest priority, a quantity of tokens reserved exclusively for the packets having said priority level is guaranteed (noted: token bucket filters for selectively assigning the high priority packets so that other

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packets do not interfere with the bandwidth reserved for guaranteed quality of service, col. 2, lines 21-26, col. 4, lines 23-29).

**Regarding claim 31**, Appala '265 discloses method, wherein: the packets accepted by the token bucket mechanism with N operating levels are placed in a queue (noted: passing the data packets to the corresponding priority queue based on the number of available tokens, col. 5, lines 33-43), and said method furthermore comprises a step for implementing a token bucket mechanism with only one level of operation with only one token buffer, so as to take the packets contained in the queue (fig. 1, see dequeuing system is operable for selectively supplying the received data packet to the output port switch based on the priority, col. 3, lines 4-11, col. 4, lines 29- 38) and send them on the network (fig. 1, see dequeuing system is operable for selectively supplying the received data packet to the output port switch based on the priority, col. 3, lines 4-11, col. 4, lines 29- 38) in carrying out a smoothing of the traffic by limiting the instantaneous bit rate to a value acceptable by the network (noted: determining if the data packets size overwhelms the assigned bandwidth of the priority queue, and subsequent dropping of the data packets, col. 4, lines 34-43).

**Regarding claim 32**, Appala '265 discloses a computer readable medium encoded with computer executable instructions for the execution of a method (fig. 1, Switching Logic with programming for making forwarding decisions of data packets, col.



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3, lines 63 to col. 4, lines 14, see, the host CPU for controlling the switching logic with respect to forwarding decisions in relation to received data packet at the ingress port) of controlling data packet traffic at input of a network (fig. 1, Ingress port of integrated switching port, col. 4, lines 1-15, (see, “method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority”, col. 2, lines 39-45), when said instructions are executed on a computer (fig. 1, Switching Logic with programming for making forwarding decisions of data packets, col. 3, lines 63 to col. 4, lines 14), wherein the traffic comprises N streams and/or sub-streams which are each associated with a priority level,  $N > 2$  (fig. 1 in combination with fig. 2, see plurality of data packets (i.e. data flows, col. 1, lines 63-66, noted: data flows corresponding to sequence of data packets, col. 62-65) being received at the interface of the integrated switch, col. 3, lines 50-62), each of the packets being marked with the priority level associated with the stream or sub-stream to which said packet belongs (fig. 2, see plurality of priorities associated with data packets (i.e. data flows, col. 1, lines 63-66, col. 4, lines 44-51) wherein the method (see, “method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority”, col. 2, lines 39-45), wherein the method comprises: a step of arrival of a packet and obtaining its priority level (see, “method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority”, col. 2, lines 39-45), a step of assigning tokens to said packet, if tokens are available for said packet (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines

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11-18, col. 4, lines 44-51), implementing a token bucket mechanism with N operating levels with N token buffers (fig. 2, see plurality of token buckets (i.e. TBF 1 to TBF n) where the number of tokens corresponds to the number of data packets and plurality of priorities queues 30, col. 31-39, col. 6, lines 7-15), each comprising a number of available tokens (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines 11-18, col. 4, lines 44-51), the tokens of each of the N token buffers being used to process one of the N priority levels (fig. 2, see plurality of Token Bucket with associated priority queues 30a to 30-30e, col. 4, lines 44-66), wherein the tokens are assigned or not assigned to said packet depending on the tokens available at least in the token buffer used to process the priority level of said packet (noted: the token bucket filters determines whether or not there are sufficient number of tokens available corresponding to the number of packets based on priority col. 2, lines 27-34, col. 5, lines 31-45), a step of each accepting said packet in a buffer (fig. 2, Queuing System 14 for storing received data packets in buffer memory 20, col. 55-59) forming a means for managing a queue (fig. 1, CPU controlling the operations of queue system 14, col. 3, lines 63-67, noted: the token bucket filters in combination with the CPU sets priorities for the serving queues, col. 5, lines 55 to col. 6, lines 6), if the packet has been assigned tokens, a step of rejecting said packet, if it has not been assigned tokens (noted: dropping the received data packet if there are insufficient number of tokens, col. 5, lines 48-54, col. 6, lines 23-32).

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**Regarding claims 33, 37,** Appala '265 discloses device for controlling data packet traffic at input of a network (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45, see, the host CPU for controlling the switching logic with respect to forwarding decisions in relation to received data packet at the ingress port, col. 3, lines 63 to col. 4, lines 5, fig. 1 in combination with fig. 2, see integrated multiport switch network), wherein the traffic comprises N streams and/or sub-streams which are each associated with a priority level,  $N > 2$  (fig. 1 in combination with fig. 2, see plurality of data packets (i.e. data flows, col. 1, lines 63-66, noted: data flows corresponding to sequence of data packets, col. 62-65) being received at the interface of the integrated switch, col. 3, lines 50-62), each of the packets being marked with the priority level associated with the stream or sub-stream to which said packet belongs (fig. 2, see plurality of priorities associated with data packets (i.e. data flows, col. 1, lines 63-66, col. 4, lines 44-51) wherein the method (see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45), wherein the method comprises: a step of arrival of a packet and obtaining its priority level (see, "method for assigning received data packets (i.e. data flows, col. 1, lines 63-66) to plurality of queues based on priority", col. 2, lines 39-45), a step of assigning tokens to said packet, if tokens are available for said packet (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines 11-18, col. 4, lines 44-51), implementing a token bucket mechanism with N operating levels with N token buffers (fig. 2, see plurality of token buckets (i.e. TBF 1 to TBF n)

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where the number of tokens corresponds to the number of data packets and plurality of priorities queues 30, col. 31-39, col. 6, lines 7-15), each comprising a number of available tokens (fig. 2, see plurality of token buffers, noted: the token bucket filters passing the data packets to corresponding priorities based on the availability of the number of tokens, col. 3, lines 11-18, col. 4, lines 44-51), the tokens of each of the N token buffers being used to process one of the N priority levels (fig. 2, see plurality of Token Bucket with associated priority queues 30a to 30-30e, col. 4, lines 44-66), wherein the tokens are assigned or not assigned to said packet depending on the tokens available at least in the token buffer used to process the priority level of said packet (noted: the token bucket filters determines whether or not there are sufficient number of tokens available corresponding to the number of packets based on priority col. 2, lines 27-34, col. 5, lines 31-45), a step of each accepting said packet in a buffer (fig. 2, Queuing System 14 for storing received data packets in buffer memory 20, col. 55-59) forming a means for managing a queue (fig. 1, CPU controlling the operations of queue system 14, col. 3, lines 63-67, noted: the token bucket filters in combination with the CPU sets priorities for the serving queues, col. 5, lines 55 to col. 6, lines 6), if the packet has been assigned tokens, a step of rejecting said packet, if it has not been assigned tokens (noted: dropping the received data packet if there are insufficient number of tokens, col. 5, lines 48-54, col. 6, lines 23-32).

Regarding claim 37, please see the Examiner comment with respect to claim 33 as discussed above.

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Regarding claim 34, please see the Examiner comments with respect to claim 27 as discussed above.

Regarding claim 35, please see the Examiner comments with respect to claim 28 as discussed above.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 29-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Appala et al (US 6,862,265 B1) in view of Yang et al (US 2002/0114334 A1).

Appala '265 discloses all the claimed limitations with the exception of being silent about the claimed features:

**Regarding claim 22**, wherein the traffic comprises N streams each corresponding to one of the streams of a multiplex of at least two streams.

However, Yang '334 from the same field of endeavor discloses the above claimed features: the method ("method for controlling data flow by differentiating data types", recited in paragraph 0020) according to claim 19, wherein the traffic comprises N streams ("active network sessions", recited in paragraph 0036, lines 1-6) each corresponding to one of the streams of a multiplex of at least two streams ("aggregating of network sessions with multiple aggregation classes", recited in paragraph 0036, lines 1-6).

In view of the above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching features of Appala '265 by using features as taught by Yang '334 in order to provide data flow control by aggregating traffic based on differentiated services as suggested in paragraph 0020 for motivation.

10. **Claims 29-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Appala et al (US 6,862,265 B1) in view of Erimli et al (US 6,925,055 B1).

Appala '265 discloses all the claimed limitations with the exception of being silent about the claimed features:

**Regarding claim 29**, wherein the assigning of tokens to a packet of priority level *i* is done in a discontinuous packet mode and the method comprises assigning: either tokens available in the token buffer of priority level *i*; or tokens available in a token buffer of a lower priority level *j*, when the tokens available in the token buffer of priority level *i* are not sufficient.

**Regarding claim 30**, wherein the assigning of tokens to a packet of priority level *i* is done in a continuous bit mode and the method comprises assigning: tokens available in the token buffer of priority level *i*; and, as a complement, tokens available in at least one token buffer of priority level *j* having lower priority, when the tokens available in the token buffer of priority level *i* are not sufficient.

However, Erimli '055 form the same field of endeavor discloses the above claimed features:

**Regarding claims 29**, wherein the assigning of tokens to a packet ("each of the tokens correspond to one or more received data packets", recited in col. 1, lines 59-62) of priority level *i* ("assign user priority or Differentiated Services Code Point to the packet", recited in col. 6, lines 41-48) is done in a discontinuous packet mode and the method comprises assigning: either tokens available in the token buffer of priority level *i*

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("the token bucket counters may vary for low and high priority bucket counters", recited in col. 59-67); or tokens available in a token buffer of a lower priority level j ("the token bucket counters may vary for low and high priority bucket counters", recited in col. 59-67), when the tokens available in the token buffer of priority level i are not sufficient ("downgraded to a lower priority level when there are insufficient tokens", recited in col. 7, lines 21-32).

**Regarding claim 30**, wherein the assigning of tokens to a packet ("each of the tokens correspond to one or more received data packets", recited in col. 1, lines 59-62) of priority level i ("assign user priority or Differentiated Services Code Point to the packet", recited in col. 6, lines 41-48) is done in a continuous bit mode ("the token bucket counters may vary for low and high priority bucket counters", recited in col. 59-67, additionally, "adding a high priority token to low priority token bucket", recited in col. 7, lines 41-48) and the method comprises assigning: tokens available in the token buffer of priority level i; and, as a complement, tokens available in at least one token buffer of priority level j having lower priority ("the token bucket counters may vary for low and high priority bucket counters", recited in col. 59-67), when the tokens available in the token buffer of priority level i are not sufficient ("downgraded to a lower priority level when there are insufficient tokens", recited in col. 7, lines 21-32).

In view of the above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Appala '0265 by using features as taught by Erimli '055 in order to provide traffic shaping per port based on priority queue as suggested in col. 1, lines 38-62 for motivation.



11. **Claim 36** is rejected under 35 U.S.C. 103(a) as being unpatentable over Appala et al (US 6,862,265 B1) in view of Oldak et al (US 7,085,236 B2).

Appala '265 discloses all the claimed limitations as set above with the exception of being silent about the claimed features: wherein said network equipment belongs to the group comprising: network equipment located between a network of an application or service provider and a network of a network service provider, constituting said network at whose input data packet traffic is controlled; and routers included in the nodes of a network of a network service provider, constituting said network at whose input a data packet traffic is controlled.

However, Oldak '236 from the same field of endeavor discloses the above claimed features: wherein said network equipment (fig. 1, Network Cores Routers 34, 36, 40, recited in col. 4, lines 39-52) belongs to the group comprising: network equipment located between a network of an application or service provider and a network of a network service provider (fig. 1, Network 10, recited in col. 7, lines 32-60) constituting said network at whose input data packet traffic is controlled ("controlling network traffic by class using DiffServ", recited in col. 5, lines 49-56); and routers (fig. 1, Edge Routers 28, 26, 30, recited in col. 4, lines 39-52) included in the nodes (fig. 1, Nodes 28, 26, 30, recited in col. 4, lines 39-52) of a network (fig. 1, Network 10) of a network service provider ("different level of forwarding assurances for IP packets by a service provider", recited in col. 6, lines 26-36), constituting said network (fig. 1, Network

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10) at whose input a data packet traffic is controlled (“using token buckets, the routers at the edge monitor and mark data packets”, recited in col. 7, lines 32-60).

In view of the above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features Appala ‘265 by using features as taught by Oldak ‘236 in order to provide differentiated services by marking packets at the edge of a network as suggested in col. 2, lines 51-67 for motivation.

### ***Allowable Subject Matter***

12. **Claim 26** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De Cnodder et al (US 2002/0087715 A1), Douceur et al (US 6247,061 B1).

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDAL ELPENORD whose telephone number is (571)270-3123. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Bin Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Candal Elpenord/

Examiner, Art Unit 2416

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2416